

FUNCTIONAL HEALTH FOOD

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Abstract of JP 7255417 (A)

PURPOSE:To obtain a functional health food having excellent preventing effect on thrombosis, myocardial infarction and angina pectoris by checking accumulation of cholesterol in a blood vessel, preventing effect on atopic dermatitis and asthenopia. **CONSTITUTION:**This functional health food is obtained by mixing fats and oils in such a way that the content of fatty acids constituting triglycerides is 20-30wt.% of docosahexaenoic acid, 2-10wt.% of alpha-linolenic acid and 2-10wt.% of gamma-linolenic acid.

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Applicant: Kanebo Ltd

Title: Functional Health Food

Claim:

1. A functional health food obtained by mixing fats and oils in such a way that fatty acids constituting triglycerides has a composition of 20-30 wt.% of docosahexaenoic acid, 2-10 wt.% of alpha-linolenic acid and 2-10 wt.% of gamma-linolenic acid. . .

#### Detailed Description of the Invention

[0001]

The present invention relates to a functional health food having preventing effect on thrombosis, myocardial infarction and angina pectoris by inhibiting accumulation of cholesterol in a blood vessel, preventing effect on atopic dermatitis and asthenopia.

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[0007]

As the oils used in the present invention containing docosahexaenoic acid, triglyceride obtained from eye socket fat of the migratory fishes such as bonito, tuna, mackerel, sardine and the like is particularly preferable with regard to the purities and yields, while oils of lower purity obtained from fats and oils obtained from fish meat and marine products by boiling method and the like may be acceptable.

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[0015]

Examples 1-15, Comparative examples 1-27

Docosahexaenoic acid oil (containing 28 wt% of docosahexaenoic acid, 0.2 wt % of  $\alpha$ -linolenic acid, 0 wt % of  $\gamma$ -linolenic acid) taken from the eye socket fat of bonito, beefsteak plant oil (containing 0 wt % of docosahexaenoic acid, 56 wt % of  $\alpha$ -linolenic acid, 0 wt % of  $\gamma$ -linolenic acid) and borage oil (containing 0 wt % of docosahexaenoic acid, 0.3 wt % of  $\alpha$ -linolenic acid, 22 wt % of  $\gamma$ -linolenic acid) was mixed so that the compositions of fatty acids indicated in Tables 1, 3 and 5 may be accomplished. Thus obtained fats and oils composition was encapsulated in a gelatin capsule (250mg of fats and oils per capsule) resulting in functional health food by using a conventional method. Further, as the comparative examples, we obtained food by encapsulating fats and oils compositions

obtained by mixing so that the fatty acid compositions indicated in Tables 2, 4 and 6 may be accomplished in a gelatin capsule (250mg of fats and oils per capsule) using a conventional method.

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[0022]

### Example 3

Seventy persons engaged in works using OA (office automation) apparatus (for four hours or more per day) were divided into 14 groups each including 5 persons (Examples 11-15 are the working examples of the present invention, and Examples 19-27 are comparative examples). Each person took 8 of the above-described capsule per day (4 in the morning and 4 in the evening) for 12 weeks. Subsequently, a questionnaire was performed and then degree of asthenopia was estimated by 5 grade evaluation (not tired: 5 points, not so tired: 4 points, tired: 3 points, more tired: 2 points, very tired: 1 point). The results are shown in Tables 5 and 6.

[0023] [Table 5]

|            | DHA  | $\alpha$ -LA | $\gamma$ -LA | others | average<br>of<br>points |
|------------|------|--------------|--------------|--------|-------------------------|
| Example 11 | 23.5 | 2.8          | 4.0          | 69.7   | 3.6                     |
| 12         | 23.3 | 2.2          | 4.0          | 70.5   | 3.4                     |
| 13         | 27.0 | 4.2          | 3.1          | 65.7   | 3.6                     |
| 14         | 25.8 | 3.3          | 3.0          | 67.9   | 3.0                     |
| 15         | 21.9 | 3.8          | 3.6          | 67.7   | 2.8                     |

[0024] [Table 6]

|            | DHA  | $\alpha$ -LA | $\gamma$ -LA | others | average<br>of<br>points |
|------------|------|--------------|--------------|--------|-------------------------|
| Example 19 | 23.5 | 0.3          | 0            | 76.2   | 2.2                     |
| 20         | 0    | 0            | 3.0          | 97.0   | 1.8                     |
| 21         | 0    | 2.4          | 0            | 97.6   | 2.4                     |
| 22         | 25.6 | 0.2          | 3.0          | 71.2   | 2.2                     |
| 23         | 25.4 | 3.0          | 0            | 71.6   | 2.6                     |
| 24         | 0    | 3.6          | 2.9          | 93.5   | 2.0                     |
| 25         | 23.3 | 3.1          | 0.7          | 72.9   | 2.6                     |
| 26         | 26.1 | 0.9          | 3.0          | 70.0   | 2.4                     |
| 27         | 15.9 | 2.5          | 3.3          | 78.3   | 2.2                     |

[0025]

Accordingly, it is clear that the present invention may provide a functional health food having preventing effect on thrombosis, myocardial infarction and angina pectoris by inhibiting accumulation of cholesterol in a blood vessel, and having preventing effect on atopic dermatitis and asthenopia.